

## 1 ABSTRACT OF THE DISCLOSURE

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3 A methodology and apparatus for measurement and identification of co-channel  
4 interferers in a GSM cellular wireless communication network is provided as part of a  
5 network survey (e.g., drive test). Repetitive time-of-arrival measurements of detected  
6 FCCH bursts on a given frequency channel are made in conjunction with power level and  
7 C/I ratio measurements of such FCCH bursts. Successful FCCH burst detection triggers  
8 SCH detection/decoding and successful SCH decoding triggers BCCH  
9 detection/decoding. Successfully decoded SCH BSIC data and possibly BCCH CellId  
10 data is associated with the corresponding FCCH burst information based on their time-of-  
11 arrival. This association is possible even with the FCCH bursts for which SCH and  
12 BCCH decoding was not successful due to the interference or some other impairment. It  
13 is sufficient to successfully decode SCH/BCCH only once per cell during the network  
14 survey in order for all detected FCCH bursts coming from this cell to be properly  
15 assigned to it. This does not requiring a priori knowledge of the network configuration or  
16 its geographical layout. Such methodology (and apparatus) can readily be adapted for  
17 other Time-Division-Multiple-Access (TDMA) cellular wireless networks.